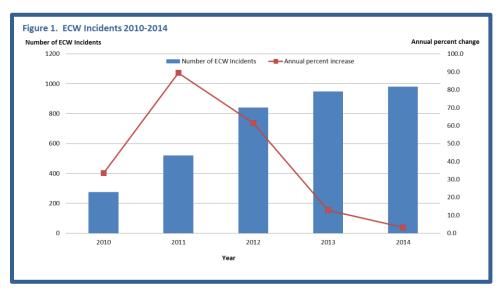


## **Electronic Control Weapons in Massachusetts:** *Trends in Growth 2010-2014*

Timothy C. Edson, Ph.D., Heather C. West, Ph.D., Research Analysts

During 2014, the number of Electronic Control Weapon (ECW) incidents increased from 949 to 980, an increase of 3.3%. This marked the smallest rate of growth since yearend 2010 (Figure 1).

Growth in the number of ECW incidents peaked in 2011 with an increase of 89.5% (246 incidents). Since 2011, the growth in ECW usage slowed to 61.4% at yearend 2012, and 12.8% at yearend 2013 (percentage point drops of 48.6% and 9.5%, respectively).



This growth in ECW incidents can be partly attributed to an increase in the number of ECW approved agencies, i.e., law enforcement agencies in Massachusetts with EOPSS approved ECW training programs, ECW trained officers, and ECW devices owned by ECW approved agencies (Table 1).

Table 1. Number of ECW Incidents, ECW Approved Agencies, Sworn Officers, ECW Trained Officers, and ECW Agency Owned Devices, Yearend 2010-2014

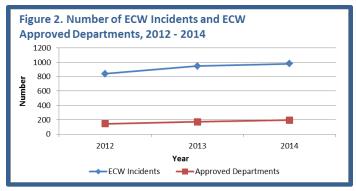
		ľ	lumber			Annual percent change, at yearend			
Characteristic	2010	2011	2012	2013	2014	2011	2012	2013	2014
ECW incidents	275	521	841	949	980	89.5 %	61.4 %	12.8 %	3.3 %
ECW approved agencies	82	123	145	172	195	50.0 %	17.9 %	18.6 %	13.4 %
Sworn officers <sup>a</sup>		6,839	7,564	8,648	9,318	/ %	10.6 %	14.3 %	7.7 %
ECW trained officers		3,134	4,013	4,620	5,363	/ %	28.0 %	15.1 %	16.1 %
ECW agency owned devices		1,656	2,193	2,586	3,358	/ %	32.4 %	17.9 %	29.9 %

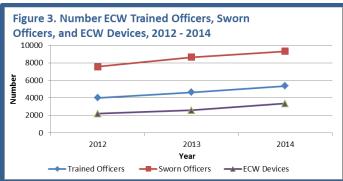
<sup>--</sup>Data not available for these years.

/ Not calculated.

<sup>a</sup>Sworn officers serving in ECW approved agencies.

<sup>&</sup>lt;sup>1</sup> An *ECW incident* is an event in which an officer (or a group of officers) issue a warning and/or deploy an ECW towards a single subject.





From yearend 2010 through 2014, the number of ECW approved agencies increased by 137.8% (82 agencies to 195 agencies) (Figure 2). While the number of ECW approved agencies continuously increased, the annual rate of growth slowed from 50.0% at yearend 2011 to 13.4% at yearend 2014.

Of the 9,318 sworn officers serving the ECW approved agencies at yearend 2014, 57.5% were ECW trained (Figure 3).<sup>2</sup> This figure is slightly larger than the percentage of sworn officers who were ECW trained at yearend 2013 (53.4%) and 2012 (53.1%), and up 11.7% from that reported at yearend 2011.

From 2011 through 2014, the number of ECW trained officers grew twice as much as the number of sworn officers serving the ECW approved agencies (71.1% as compared to 36.2%). Additionally, the annual rate of

growth in the number of ECW trained officers consistently exceeded the rate of growth of sworn officers. From yearend 2011 to yearend 2012, ECW trained officers increased 28.0% compared to the 10.6% growth in the number of sworn officers. Though growth in the number of ECW trained officers slowed to 15.1% in 2014, it remained fairly stable in 2014 increasing by 1.0% to 16.1%. In both years, these rates exceeded that of sworn officers (14.3% and 7.7%, respectively).

Additionally, from 2012 to 2014, ECW approved agencies increased the number of ECW devices owned by 102.8% (1,656 devices to 3,358 devices). The growth in the number of ECW devices peaked at yearend 2011 (32.4%), followed by a more modest growth of 17.9% from 2012 to 2013. The growth rate increased considerably in 2014 to 29.9%. The annual growth in the number of ECW devices surpassed the growth of ECW approved agencies and the number of ECW trained officers, with the exception being the growth in ECW approved agencies in 2013.

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<sup>&</sup>lt;sup>2</sup> If an officer has not been trained on proper ECW usage, per the EOPSS approved training program, he/she is not authorized to use the devices.

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		Number of incidents <sup>a</sup>				
Agency type		2011	2012	2013	2014	
Total		521	841	949	980	
Non-municip		4	2	0		
	Cape Cod Regional Law	0	0	0		
	Enforcement Council	_	_	_		
	MA State Police	3	2	0		
	Martha's Vineyard Police Tactical Response Team	0	0	0		
	Massasoit Community College	-		-		
	Northeast MA Law Enforcement Council	1	0	0		
Municipal		517	839	949	97	
	Abington	0	9	3		
	Acushnet		0	2		
	Adams	1	1	4		
	Amesbury	5	6	0		
	Andover	2	2	2		
	Aquinnah					
	Ashburnham	6	0	3		
	Athol		11	41		
	Attleboro	14	17	10		
	Auburn			0		
	Ayer		5	10		
	Barnstable	33	36	45		
	Barre		3	6		
	Becket					
	Belchertown	2	2	4		
	Berkley	0	0	0		
	Bernardston	0	0	0		
	Beverly Billerica	2	5	4		
	Blackstone	2	2	1		
	Bourne		10	12		
	Boxborough	_	-	0		
	Boxford					
	Brewster			0		
	Bridgewater	2	0	2		
	Brockton		-	6		
	Brookfield	_	_	2		
	Canton	1	3	2		
	Carver		_	2		
	Chelmsford	3	3	1		
	Chelsea	17	6	15		
	Clinton			0		
	Concord	0	0	1		

<sup>--</sup> Data not collected as agency did not have an approved ECW training program.

<sup>&</sup>lt;sup>a</sup> As reported in *Annual Electronic Control Weapons Use Brief: Electronic Control Weapons in Massachusetts: 2014* (July 2015).

		Number of incidents <sup>a</sup>					
ency type		2011	2012	2013	2014		
	Dalton	3	1	0			
	Danvers		0	5			
	Dartmouth	0	8	13			
	Deerfield	7	5	3			
	Dennis	0	2	5			
	Dighton	0	0	0			
	Dover		0	2			
	Dracut		-	5			
	Dunstable			0			
	Duxbury	2	2	2			
	East Bridgewater	-	3	2			
	East Brookfield	2	2	2			
	Eastham	1	1	1			
	Edgartown	-	_	2			
	Erving	-	0	0			
	Everett		_	7			
	Fairhaven	9	7	5			
	Fall River	28	44	37			
	Falmouth	-	15	12			
	Foxborough	1	6	2			
	Framingham	3	4	2			
	Franklin	1	3	6			
	Freetown	3	0	2			
	Gardner	5	12	10			
	Georgetown	1	0	1			
	Gill	0	0	1			
	Gosnold	-		-			
	Grafton		-	0			
	Granville	0	0	0			
	Great Barrington	-	_	3			
	Greenfield	18	12	9			
	Groton	0	0	0			
	Groveland	0	1	0			
	Hampden	-	2	0			
	Hanson	-		0			
	Hardwick	4	3	3			
	Harwich	6	0	2			
	Hingham	2	11	5			
	Holden	0	0	2			
	Holliston		-	-			
	Holyoke		6	37			
	Hopedale	5	0	0			
	Hubbardston	3	4	1			
	Hudson	0	4	5			

<sup>--</sup> Data not collected as agency did not have an approved ECW training program.

<sup>&</sup>lt;sup>a</sup> As reported in *Annual Electronic Control Weapons Use Brief: Electronic Control Weapons in Massachusetts: 2014* (July 2015).

	Number of incidents <sup>a</sup>						
gency type		2011	2012	2013	2014		
	Hull						
	Ipswich	0	0	0			
	Lakeville						
	Lanesborough		0	0			
	Lawrence	19	26	26			
	Lee		2	0			
	Lenox		0	2			
	Leominster	23	18	10			
	Littleton	3	1	2			
	Lunenburg		-	-			
	Lynnfield	0	0	0			
	Mansfield	5	4	1			
	Marblehead			0			
	Marion		0	9			
	Marlborough		0	12			
	Marshfield		-	-			
	Mashpee	6	7	7			
	Maynard	0	0	2			
	Mendon	1	2	0			
	Methuen	6	1	4			
	Middleborough	13	10	6			
	Middleton	0	3	1			
	Milford	2	3	16			
	Millbury	-	-	1			
	Millville	4	1	0			
	Montague	2	0	0			
	Nantucket	2	5	2			
	Natick	10	3	10			
	New Bedford	14	145	125	1		
	New Braintree	0	0	0			
	Newbury		_	2			
	Norfolk	0	0	1			
	North Adams	5	4	5			
	North Andover	-	0	0			
	North Attleboro	0	0	0			
	North Brookfield	1	2	3			
	North Reading	0	0	0			
	Northborough	0	0	0			
	Northfield	0	0	0			
	Norton	8	5	12			
	Norwood	1	16	12			
	Oak Bluffs	-	-	1			
	Oakham						
	Orleans	_	_				

<sup>--</sup> Data not collected as agency did not have an approved ECW training program.

<sup>&</sup>lt;sup>a</sup> As reported in *Annual Electronic Control Weapons Use Brief: Electronic Control Weapons in Massachusetts: 2014* (July 2015).

		Number of incidents <sup>a</sup>					
ency type		2011	2012	2013	2014		
•	Oxford	0	14	8			
	Palmer		7	24			
	Paxton	0	0	1			
	Peabody	3	5	3			
	Pembroke	2	8	3			
	Pepperell	4	3	6			
	Petersham	0	0	1			
	Phillipston	0	0	0			
_	Pittsfield	24	14	13			
	Plainville	0	0	3			
	Plymouth	4	35	31			
	Plympton	1	0	0			
	Provincetown	2	2	5			
	Raynham	1	0	6			
	Rehoboth	0	10	0			
	Revere		-				
_	Rockland	4	7	7			
	Rowley	0	0	0			
<u>:</u>	Salisbury	4	7	2			
:	Sandwich	0	2	6			
:	Seekonk	6	3	17			
:	Sharon	0	0	0			
:	Sheffield						
:	Sherborn	3	3	0			
:	Shrewsbury		_	_			
:	Somerset	2	1	3			
:	South Hadley	1	5	0			
:	Southborough		-	-			
	Southbridge	10	36	18			
:	Southwick	-	-	2			
:	Spencer	3	3	10			
:	Sterling	0	2	0			
_	Stoughton		6	24			
:	Sturbridge	0	1	1			
_	Sudbury						
:	Sunderland		0	0			
:	Swampscott		0	0			
	Swansea	2	3	4			
_	Taunton	13	22	18			
	Templeton	6	0	2			
_	Tewksbury	5	12	11			
	Tisbury		_	0			
_	Topsfield	2	3	0			
	Townsend	_					

<sup>--</sup> Data not collected as agency did not have an approved ECW training program.

<sup>&</sup>lt;sup>a</sup> As reported in *Annual Electronic Control Weapons Use Brief: Electronic Control Weapons in Massachusetts: 2014* (July 2015).

Appendix Tab	ole 1-cont. Number of ECW I	ncidents, 2011 - 20					
		Number of incidents <sup>a</sup>					
Agency type		2011	2012	2013	2014		
	Truro	1	2	2	2		
	Tyngsborough	0	0	1	1		
	Upton			0	C		
	Uxbridge				C		
	Walpole				2		
	Wareham	14	31	14	27		
	Warren			2	C		
	Warwick			0	C		
	Webster	25	9	8	11		
	Wellfleet		-	1	(		
	West Boylston	2	0	1	2		
	West Bridgewater		-	0	1		
	West Brookfield			3	2		
	West Springfield	0	0	1	(		
	West Tisbury				(		
	Westfield	26	18	16	14		
	Westminster	2	5	2	1		
	Westport	0	2	6	1		
	Westwood				(		
	Williamstown	2	1	5	2		
	Winchendon	3	3	6	1		
	Woburn	_	-	0	3		
	Worcester	9	7	4	g		
	Wrentham	-	-	-	3		
	Yarmouth	12	9	4	10		

<sup>--</sup> Data not collected as agency did not have an approved ECW training program.

<sup>&</sup>lt;sup>a</sup> As reported in *Annual Electronic Control Weapons Use Brief: Electronic Control Weapons in Massachusetts: 2014* (July 2015).